

ABSTRACT OF THE DISCLOSURE

A service discovery mechanism may allow clients in a distributed computing environment to search for services. The service discovery mechanism may allow a client to request a capability credential from a service. The distributed computing environment may include a mechanism for a client to negotiate service access rights and to then obtain a capability credential that may be used to obtain the service's access interface to the set or subset of the service's capabilities that were requested or negotiated by the client. In one embodiment, the client may present to the service a set of desired capabilities. The service may then respond with a capability credential that may convey to the client the rights to use the requested capabilities. A complete service advertisement may be needed to create a message endpoint for accessing the service. In an embodiment, the capability credential may be used by a client to obtain a complete advertisement for only the requested or negotiated capabilities. The capability credential may provide an additional level of security for the service provider. The capability credential that may be used to receive the complete advertisement may also be used to construct a message gate to communicate with the service where the gate embeds the capability credential in each message to the service.